

DESIGN OF TWENPOWER OPTO SINGLE-CORE MEDIUM-VOLTAGE CABLES

characteristics:

- circular single-core cable
- the conductor screen, the insulation and the insulation screen are applied in a single three-layer extrusion process and vulcanized under nitrogen pressure at one go. The insulation provides, also due to the "dry cross-linking process", good resistance to water-treeing and retains, even after ageing, a high electrical strength;
- application: public utilities, industry, non-residential construction and related fields.



Design

conductors

circular conductors made of stranded copper wires or of solid aluminium. Optionally, aluminium conductors are also available in a stranded version, for greater flexibility.

conductor screen

semi-conductive polymer layer of at least 0.5 mm thick.

insulation

high-quality XLPE

insulation screen

semi-conductive cross-linked polymer layer. This layer is covered by a bedding of conductive swelling tape to ensure longitudinal watertightness.

earthing screen

copper wires, glass fibres, with an open pattern counterwound copper strip. The glass fibres have a monitoring function. They are protected by means of a special tube made of a high-quality plastic.

options

longitudinally and quasi transversally watertight design

with a longitudinally and quasi transversally watertight design, swelling tape is applied on top of the earthing screen.

transversally and longitudinally watertight design

with this option, the space between the earthing screen wires and the glass fibres is filled with a semi-conductive rubber-based filling sheath. An aluminium foil and a PE sheath are sandwiched on top of the filling sheath, with a copper wire for equipotential bonding to prevent any potential difference between copper screen and aluminium foil.

outer sheath

abrasion-resistant PE (ST7)

options

- armoring of copper flat wire;
- lead-sheathed, especially designed for contaminated soils, as found in the petrochemical industry;
- designs according to customer specifications.

cable designation

Longitudinally and quasi transversally watertight

YMeKrvaslqwd ... kV 1 x .. rs+as .. + .. x SM

YMeKrvaslqwd ... kV 1 x .. Alrm+as .. + .. x SM

YMeKrvaslqwd ... kV 1 x .. Alrs+as .. + .. x SM

Transversally and longitudinally watertight

YMeKrvasdldwd ... kV 1 x .. rs+as .. + .. x SM

YMeKrvasdldwd ... kV 1 x .. Alrm+as .. + .. x SM

YMeKrvasdldwd ... kV 1 x .. Alrs+as .. + .. x SM